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EX PARTE FILING

November 5, 1998

Magalie Roman-Salas
Secretary
Federal Communications Commission
445 12th Street, SW - TW-A325
Washington, DC 20554

Re: CC Docket No. 96-262

Dear Ms. Salas:

On October 26, 1998, USTA filed comments in CC Docket No. 96-262. Attached hereto is a revised version of Attachment D on diskette which includes the data inputs, formulae and calculations. Correction of a computational error in the EXCEL worksheet constructing the BEA composite asset price required slight revisions to some appendix charts in Attachment D which are reflected on the diskette. The corrected charts are included in the complete set of paper appendices (A through E) also attached. The attached Notice of Revision details the corrections.

In accordance with Section 1.1206(b)(1) of the FCC's rules, two copies of this notice are being submitted today for inclusion in the records for this proceeding. Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Linda L. Kent".

Linda L. Kent
Associate General Counsel

attachment
enclosure

cc: (w/attachments & enclosure)
T. Preiss
ITS

No. of Copies rec'd
DATE

Handwritten initials "OH" in black ink, written over a horizontal line.

Notice of Revision

The correction of a computational error in the EXCEL worksheet constructing the BEA composite asset price required slight revisions to some appendix charts in Attachment D to USTA's filing on October 26, 1998. The correction had small and exactly offsetting effects on the TFP and input price differentials and, consequently, no effect on the calculated X-Factors. As a result, the spreadsheet correction resulted in no change to the text of the report in Attachment D. The affected appendix charts are D1, D9, D11, and D12 in Appendix A and D1 in Appendix E. No changes to any other appendices were required. However, for the user's convenience, a complete set of appendices (A through E) is enclosed.

Professor Frank M. Gollop

November 4, 1998

APPENDIX A

UPDATED FCC MODEL

1985-1997

(Revised November 4, 1998)

Chart D1: Components of FCC LEC Price Cap X-Factor [Excluding CPD]

Year	Input Price Growth Rates			Total Factor Productivity Growth Rates			LEC Price/Productivity Differential G=C+F
	Total RBOCs A	U.S. Nonfarm Business Sector B	Differential C=B-A	Total RBOCs D	U.S. Nonfarm Business Sector E	Differential F=D-E	
1984							
1985							
1986	5.20%	2.33%	-2.87%	2.84%	1.10%	1.74%	-1.13%
1987	0.72%	3.45%	2.73%	3.13%	-0.50%	3.63%	6.36%
1988	-1.39%	5.02%	6.41%	0.32%	0.30%	0.02%	6.42%
1989	-2.40%	2.42%	4.82%	1.90%	0.20%	1.70%	6.52%
1990	1.86%	3.31%	1.45%	6.83%	-0.70%	7.53%	8.99%
1991	-0.69%	1.77%	2.46%	2.19%	-1.41%	3.60%	6.06%
1992	2.79%	3.15%	0.36%	4.43%	1.71%	2.72%	3.08%
1993	2.47%	2.18%	-0.29%	4.00%	0.20%	3.80%	3.51%
1994	-0.05%	3.37%	3.42%	2.35%	0.30%	2.05%	5.47%
1995	1.23%	2.61%	1.38%	5.11%	-0.20%	5.31%	6.70%
1996	5.94%	3.00%	-2.94%	5.95%	0.89%	5.05%	2.11%
1997	0.90%	2.86%	1.96%	2.76%	0.58%	2.18%	4.14%
Averages							
[1986-94]	0.94%	3.00%	2.05%	3.11%	0.13%	2.98%	5.03%
[1986-95]	0.97%	2.96%	1.99%	3.31%	0.10%	3.21%	5.20%
[1987-95]	0.50%	3.03%	2.53%	3.36%	-0.01%	3.37%	5.90%
[1988-95]	0.48%	2.98%	2.50%	3.39%	0.05%	3.34%	5.84%
[1989-95]	0.74%	2.69%	1.94%	3.83%	0.01%	3.82%	5.76%
[1990-95]	1.27%	2.73%	1.46%	4.15%	-0.02%	4.17%	5.63%
[1991-95]	1.15%	2.62%	1.47%	3.62%	0.12%	3.50%	4.96%
[1986-97]	1.38%	2.95%	1.57%	3.48%	0.21%	3.28%	4.85%
[1987-97]	1.03%	3.01%	1.98%	3.54%	0.13%	3.42%	5.40%
[1988-97]	1.06%	2.97%	1.90%	3.58%	0.19%	3.40%	5.30%
[1989-97]	1.34%	2.74%	1.40%	3.95%	0.17%	3.77%	5.17%
[1990-97]	1.80%	2.78%	0.98%	4.20%	0.17%	4.03%	5.01%
[1991-97]	1.80%	2.70%	0.91%	3.83%	0.30%	3.53%	4.44%
[1992-97]	2.21%	2.86%	0.65%	4.10%	0.58%	3.52%	4.17%
[1993-97]	2.10%	2.80%	0.71%	4.03%	0.35%	3.68%	4.38%

Columns B and E for 1997 are estimated, based on the average of 1992-1996.

Chart D2: RBOC Interstate Revenues

Year	End User A	Interstate Switched Access B	Special Access C	Total Interstate D = A + B + C
1984				
1985	\$1,499,413,893	\$10,906,203,190	\$1,960,688,644	\$14,366,305,727
1986	\$2,400,475,814	\$10,484,265,170	\$2,574,800,716	\$15,459,541,700
1987	\$3,090,639,929	\$9,611,996,187	\$2,657,677,439	\$15,360,313,555
1988	\$3,604,221,000	\$9,662,529,000	\$2,539,698,000	\$15,806,448,000
1989	\$4,398,692,000	\$9,092,575,000	\$2,253,922,000	\$15,745,189,000
1990	\$4,679,142,000	\$8,595,750,000	\$2,209,064,000	\$15,483,956,000
1991	\$4,828,177,000	\$8,514,130,000	\$2,119,037,000	\$15,461,344,000
1992	\$4,963,262,000	\$8,650,880,000	\$2,153,565,000	\$15,767,707,000
1993	\$5,244,094,000	\$8,999,065,000	\$2,097,997,000	\$16,341,156,000
1994	\$5,589,662,000	\$9,293,783,000	\$2,217,125,000	\$17,100,570,000
1995	\$5,770,285,000	\$9,332,869,000	\$2,529,667,000	\$17,632,821,000
1996	\$5,930,960,000	\$9,409,639,000	\$3,070,598,000	\$18,411,197,000
1997	\$6,268,026,000	\$8,763,815,000	\$3,851,028,000	\$18,882,869,000

Chart D3: RBOC REVENUES (Excluding Miscellaneous Services)

	Local Service	Intrastate Toll and Intrastate Access	Interstate	Total
Year	A	B	C	D = A + B + C
1984				
1985	\$26,960,554,164	\$13,047,095,682	\$14,366,305,727	\$54,373,955,573
1986	\$28,626,174,049	\$13,538,946,795	\$15,459,541,700	\$57,624,662,544
1987	\$29,150,842,991	\$14,166,723,124	\$15,360,313,555	\$58,677,879,670
1988	\$29,226,988,000	\$14,994,975,000	\$15,806,448,000	\$60,028,411,000
1989	\$29,973,157,000	\$14,868,219,000	\$15,745,189,000	\$60,586,565,000
1990	\$30,699,085,000	\$15,014,729,000	\$15,483,956,000	\$61,197,770,000
1991	\$32,059,008,000	\$14,522,276,000	\$15,461,344,000	\$62,042,628,000
1992	\$33,359,990,000	\$14,225,181,000	\$15,767,707,000	\$63,352,878,000
1993	\$34,598,957,000	\$14,496,831,000	\$16,341,156,000	\$65,436,944,000
1994	\$35,758,637,000	\$14,355,983,000	\$17,100,570,000	\$67,215,190,000
1995	\$37,684,860,000	\$13,123,225,000	\$17,632,821,000	\$68,440,906,000
1996	\$40,523,387,000	\$12,987,476,000	\$18,411,197,000	\$71,922,060,000
1997	\$42,460,592,000	\$12,308,613,000	\$18,882,869,000	\$73,652,074,000

Chart D4: Calculation of Fisher Ideal Index for Interstate Output

Year	Revenue Shares			Quantities			Output Indices			Interstate Output Quantity Index	Growth
	End User	Interstate Switched Access	Special Access	Access Lines	Switched Access Minutes	Special Access Lines	Laspeyres A	Paasche B	Fisher Relative $C=(A*B)^{0.5}$		
1984											
1985	10.44%	75.92%	13.65%	92,671,959	156,853,820,000	1,230,590	1.000000	1.000000	1.000000	1.000000	
1986	15.53%	67.82%	16.66%	95,333,884	157,302,701,000	1,664,101	1.053249	1.052253	1.052751	1.052751	5.14%
1987	20.12%	62.58%	17.30%	98,228,585	173,154,171,000	1,764,445	1.083098	1.078813	1.080953	1.137975	7.78%
1988	22.80%	61.13%	16.07%	98,270,787	187,663,836,000	2,701,817	1.144443	1.114960	1.129605	1.285462	12.19%
1989	27.94%	57.75%	14.31%	101,190,050	210,406,134,000	2,448,090	1.065766	1.058920	1.062338	1.365595	6.05%
1990	30.22%	55.51%	14.27%	103,857,988	231,960,296,000	3,518,005	1.129086	1.114500	1.121769	1.531882	11.49%
1991	31.23%	55.07%	13.71%	107,383,807	246,710,182,000	5,151,699	1.111811	1.094856	1.103301	1.690127	9.83%
1992	31.48%	54.86%	13.66%	108,938,065	262,187,655,000	6,033,139	1.062516	1.060258	1.061386	1.793878	5.96%
1993	32.09%	55.07%	12.84%	112,196,681	278,173,161,000	10,153,615	1.136148	1.102619	1.119258	2.007812	11.27%
1994	32.69%	54.35%	12.97%	115,264,861	298,342,017,323	13,824,365	1.095119	1.086800	1.090952	2.190425	8.71%
1995	32.72%	52.93%	14.35%	119,887,506	334,981,582,000	16,107,677	1.101268	1.099925	1.100596	2.410774	9.59%
1996	32.21%	51.11%	16.68%	125,333,996	362,159,903,714	20,775,150	1.099381	1.098687	1.099034	2.649522	9.44%
1997	33.19%	46.41%	20.39%	131,458,355	387,587,696,669	24,479,958	1.081366	1.083163	1.082264	2.867483	7.91%
										Average[1986-95]	8.80%
										Average[1986-97]	8.78%

Chart D5: Calculation of Fisher Ideal Index for Total Company Output

Year	Revenue Shares			Quantities			Output Indices			Total Company Output Index	Growth
	Local Service	Intrastate Toll and Intrastate Access	Interstate	Number of Local Calls	Intrastate DEMs	Interstate Quantity Index	Laspeyres	Paasche	Fisher Relative $C=(A*B)^{0.5}$		
	A	B	C				A	B			
1984											
1985	49.58%	24.00%	26.42%	310,696,999,600	164,191,177,000	1.000000	1.000000	1.000000	1.000000	1.000000	
1986	49.68%	23.50%	26.83%	315,839,746,231	173,173,536,000	1.052751	1.035272	1.034895	1.035083	1.035083	3.45%
1987	49.68%	24.14%	26.18%	320,735,770,416	183,597,411,000	1.137975	1.043561	1.042639	1.043100	1.079696	4.22%
1988	48.69%	24.98%	26.33%	318,724,184,964	191,904,837,000	1.285462	1.041736	1.039449	1.040592	1.123522	3.98%
1989	49.47%	24.54%	25.99%	330,212,044,704	207,298,177,000	1.365595	1.054001	1.053389	1.053695	1.183850	5.23%
1990	50.16%	24.53%	25.30%	342,403,840,684	217,913,904,000	1.531882	1.062478	1.060759	1.061618	1.256797	5.98%
1991	51.67%	23.41%	24.92%	353,219,571,000	219,713,721,000	1.690127	1.044009	1.042832	1.043420	1.311367	4.25%
1992	52.66%	22.45%	24.89%	365,468,629,000	224,278,538,000	1.793878	1.038080	1.038005	1.038042	1.361254	3.73%
1993	52.87%	22.15%	24.97%	376,995,406,000	227,540,869,000	2.007812	1.049556	1.048164	1.048860	1.427765	4.77%
1994	53.20%	21.36%	25.44%	392,601,075,000	235,362,364,000	2.190425	1.052215	1.052028	1.052121	1.502182	5.08%
1995	55.06%	19.17%	25.76%	409,383,799,000	246,926,539,000	2.410774	1.058829	1.058314	1.058572	1.590167	5.69%
1996	56.34%	18.06%	25.60%	422,262,867,000	258,038,233,255	2.649522	1.051465	1.050451	1.050958	1.671199	4.97%
1997	57.65%	16.71%	25.64%	433,086,737,000	269,649,953,751	2.867483	1.043627	1.042853	1.043240	1.743462	4.23%
Average[1986-97]											4.64%
Average[1986-95]											4.63%

The Intrastate DEMs values for 1996 and 1997 are calculated using a 4.5% annual growth rate from the 1995 value.

Chart D6: Labor Input Price and Growth

Year	Total Employees A	Total Compensation B	Labor Rate Annual C = B / A	Labor Price Index (Base = 1985)	Labor Growth %Chg in A
1984					
1985	504,113	16,991,572,326	33705.88	1.000000	
1986	482,698	16,728,435,454	34656.11	1.028192	-4.34%
1987	477,714	16,978,905,847	35541.99	1.054474	-1.04%
1988	466,827	17,030,359,791	36481.09	1.082336	-2.31%
1989	461,149	16,910,850,694	36671.12	1.087974	-1.22%
1990	443,105	17,586,868,921	39690.07	1.177541	-3.99%
1991	414,457	17,186,211,200	41466.81	1.230255	-6.68%
1992	411,167	17,160,988,000	41737.27	1.238279	-0.80%
1993	395,639	17,956,438,000	45385.91	1.346528	-3.85%
1994	367,196	17,154,284,000	46716.97	1.386018	-7.46%
1995	346,843	16,203,522,000	46717.17	1.386024	-5.70%
1996	338,040	16,597,889,075	49100.37	1.456730	-2.57%
1997	338,177	17,451,673,000	51605.14	1.531043	0.04%
			Average[1986-95]		-3.74%
			Average[1986-97]		-3.33%

Chart D7: Summary of Capital Adjustments and Average Depreciation

Year	TPIS.BOY A	Unadj. Additions B	TPIS.EOY C	Retires D=A+B-C	Adjustment Factor E	Adjusted Additions F = B * E	Adjusted EOY TPIS G = A+F-D	Depreciation Accruals H	Adjusted Depreciation Rate I=H/((A+G)/2)
1984									
1985	138,879,365	15,001,998	149,061,793	4,819,569	0.8880	13,321,774	147,381,569	10,241,376	7.155%
1986	149,061,793	14,842,725	159,010,189	4,894,328	0.8880	13,180,340	157,347,804	11,826,961	7.720%
1987	159,010,189	14,138,370	167,720,577	5,427,983	0.8880	12,554,872	166,137,079	13,311,655	8.188%
1988	168,505,114	14,284,742	175,860,216	6,929,640	1.0000	14,284,742	175,860,216	13,134,992	7.629%
1989	175,860,216	13,283,569	182,978,381	6,165,404	1.0000	13,283,569	182,978,381	13,420,810	7.480%
1990	182,978,381	14,476,334	187,168,695	10,286,020	1.0000	14,476,334	187,168,695	13,439,933	7.262%
1991	187,168,695	14,527,049	192,034,545	9,661,199	1.0000	14,527,049	192,034,545	13,200,593	6.962%
1992	192,034,545	14,611,866	196,411,915	10,234,496	1.0000	14,611,866	196,411,915	13,337,581	6.867%
1993	196,411,915	14,860,116	203,082,418	8,189,613	1.0000	14,860,116	203,082,418	14,032,782	7.025%
1994	203,082,418	14,717,999	209,325,562	8,474,855	1.0000	14,717,999	209,325,562	14,863,196	7.208%
1995	209,325,562	15,374,568	217,430,207	7,269,923	1.0000	15,374,568	217,430,207	15,358,553	7.198%
1996	217,430,207	18,026,150	227,317,120	8,139,237	1.0000	18,026,150	227,317,120	16,252,281	7.309%
1997	227,317,120	18,253,199	236,896,179	8,674,140	1.0000	18,253,199	236,896,179	16,667,034	7.181%
							Average[1985-95]		7.336%
							Average[1985-97]		7.322%

Chart D8: Construction of Materials Quantity Index

Year	Materials Price Index (1985=1.00) A	Operating Expense B	Depreciation & Amortization Expense C	Employee Compensation D	Materials Expense E = B - C - D	Materials Quantity Index F = E / A	Materials Quantity Index (1985 = 1.0) G	Materials Quantity Index Growth H
1984								
1985	1.000000	40,953,072,435	10,024,710,656	16,991,572,326	13,936,789,453	13,936,789,453	1.000000	
1986	1.031346	42,424,084,849	11,592,001,248	16,728,435,454	14,103,648,147	13,674,987,526	0.981215	-1.90%
1987	1.053529	44,293,127,430	13,316,999,560	16,978,905,847	13,997,222,023	13,286,033,126	0.953307	-2.89%
1988	1.086392	46,809,139,000	13,646,937,000	17,030,359,791	16,131,842,209	14,849,003,149	1.065454	11.12%
1989	1.126234	48,600,813,000	13,860,101,000	16,910,850,694	17,829,861,306	15,831,394,231	1.135943	6.41%
1990	1.172025	49,544,744,000	13,931,515,000	17,586,868,921	18,026,360,079	15,380,530,820	1.103592	-2.89%
1991	1.204935	50,901,049,000	13,499,778,000	17,186,211,200	20,215,059,800	16,776,884,245	1.203784	8.69%
1992	1.234797	50,698,625,000	13,822,882,000	17,160,988,000	19,714,755,000	15,965,992,971	1.145601	-4.95%
1993	1.255352	52,766,635,000	14,244,514,000	17,956,438,000	20,565,683,000	16,382,401,649	1.175479	2.57%
1994	1.291436	55,916,863,000	15,068,058,000	17,154,284,000	23,694,521,000	18,347,418,469	1.316474	11.33%
1995	1.321671	56,831,094,000	15,556,284,000	16,203,522,000	25,071,288,000	18,969,381,288	1.361101	3.33%
1996	1.361400	57,884,494,000	16,377,242,000	16,597,889,075	24,909,362,925	18,296,870,339	1.312847	-3.61%
1997	1.395497	59,731,175,000	16,758,832,000	17,451,673,000	25,520,670,000	18,287,867,671	1.312201	-0.05%

Chart D8a: Adjustments of 1985-87 RBOC Operating Expenses for Accounting Changes

	USTA Study Operating Expense A	Nonregulated Expense Adjustmts B	Capital/Expense Shift C	Shift Factor D = (A+B+C)/A	RBOC Operating Expense E	Adjusted Operating Exp. F = D * E
1985	46,223,368,251	406,886,403	1,985,079,714	1.05175	38,938,104,053	40,953,072,435
1986	48,113,849,487	471,112,072	1,959,363,711	1.05052	40,384,079,165	42,424,084,849
1987	49,562,282,080	1,089,570,002	1,908,791,665	1.06050	41,766,392,483	44,293,127,430

Chart D9: Capital Quantity and Price Index Calculations

	Benchmark A	Adjusted Capital Additions B	BEA Composite Asset Price C	Capital Stock Quantity D	Capital Input Quantity E	Capital Input Quantity Growth F	Property Income /w Depreciation G	Capital Rental Price** H	Capital Rental Price Index I	Rental Price Index Growth J
Year										
1984		n/a		103,903,095						
1985	109,602,959	13,321,774	1.000000	109,602,710	1.000000		23,445,593,794	0.225648657	1.000000	
1986		13,180,340	1.010482	114,606,056	1.054855	0.053403	26,792,578,943	0.244451792	1.083329	8.00%
1987		12,554,872	1.027339	118,419,511	1.103009	0.044639	27,701,751,800	0.241712809	1.071191	-1.13%
1988		14,284,742	1.030466	123,594,868	1.139711	0.032733	26,866,209,000	0.226873162	1.005427	-6.34%
1989		13,283,569	1.070178	126,940,642	1.189521	0.042776	25,845,853,000	0.209117526	0.926740	-8.15%
1990		14,476,334	1.089729	130,912,833	1.221721	0.026711	25,584,541,000	0.201547279	0.893191	-3.69%
1991		14,527,049	1.102220	134,489,094	1.259951	0.030812	24,641,357,000	0.188227208	0.834161	-6.84%
1992		14,611,866	1.108304	137,807,183	1.294370	0.026951	26,477,135,000	0.196871985	0.872471	4.49%
1993		14,860,116	1.112312	141,057,540	1.326305	0.024372	26,914,823,000	0.195307838	0.865540	-0.80%
1994		14,717,999	1.117639	143,878,628	1.357587	0.023312	26,366,385,000	0.18691936	0.828365	-4.39%
1995		15,374,568	1.114809	147,115,146	1.384739	0.019802	27,166,096,000	0.188812588	0.836755	1.01%
1996		18,026,150	1.120672	152,408,144	1.415888	0.022246	30,414,808,000	0.206741514	0.916210	9.07%
1997		18,253,199	1.120672	157,515,458	1.466830	0.035346	30,679,731,000	0.201299813	0.892094	-2.67%

Chart D10: Factor Shares of Total Payments

Year	Labor Compensation	Materials Payment	Property Income /w Depreciation	Total Factor Payment	Labor Compensation Share	Materials Payment Share	Property Income /w Depreciation Share
1984							
1985	16,991,572,326	13,936,789,453	23,445,593,794	54,373,955,573	31.25%	25.63%	43.12%
1986	16,728,435,454	14,103,648,147	26,792,578,943	57,624,662,544	29.03%	24.48%	46.49%
1987	16,978,905,847	13,997,222,023	27,701,751,800	58,677,879,670	28.94%	23.85%	47.21%
1988	17,030,359,791	16,131,842,209	26,866,209,000	60,028,411,000	28.37%	26.87%	44.76%
1989	16,910,850,694	17,829,861,306	25,845,853,000	60,586,565,000	27.91%	29.43%	42.66%
1990	17,586,868,921	18,026,360,079	25,584,541,000	61,197,770,000	28.74%	29.46%	41.81%
1991	17,186,211,200	20,215,059,800	24,641,357,000	62,042,628,000	27.70%	32.58%	39.72%
1992	17,160,988,000	19,714,755,000	26,477,135,000	63,352,878,000	27.09%	31.12%	41.79%
1993	17,956,438,000	20,565,683,000	26,914,823,000	65,436,944,000	27.44%	31.43%	41.13%
1994	17,154,284,000	23,694,521,000	26,366,385,000	67,215,190,000	25.52%	35.25%	39.23%
1995	16,203,522,000	25,071,288,000	27,166,096,000	68,440,906,000	23.68%	36.63%	39.69%
1996	16,597,889,075	24,909,362,925	30,414,808,000	71,922,060,000	23.08%	34.63%	42.29%
1997	17,451,673,000	25,520,670,000	30,679,731,000	73,652,074,000	23.69%	34.65%	41.65%

Chart D11: Input Quantity Index

Year	Shares			Quantities			Quantity Indices				Growth
	Labor	Materials	Property	Labor	Materials	Capital	Laspeyres	Paasche	Fisher	Fisher	
	Compensation	Payment	Income /w Depreciation				A	B	Relative $C=(A*B)^{0.5}$	Chain	
1984											
1985	31.25%	25.63%	43.12%	504,113	13,936,789,453	1.00000	1.00000	1.00000	1.00000	1.00000	
1986	29.03%	24.48%	46.49%	482,698	13,674,987,526	1.05486	0.96820	0.96822	1.00611	1.00611	0.61%
1987	28.94%	23.85%	47.21%	477,714	13,286,033,126	1.10301	0.98139	0.98140	1.01099	1.01717	1.09%
1988	28.37%	26.87%	44.76%	466,827	14,849,003,149	1.13971	1.04067	1.04083	1.03731	1.05512	3.66%
1989	27.91%	29.43%	42.66%	461,149	15,831,394,231	1.18952	1.02594	1.02654	1.03384	1.09082	3.33%
1990	28.74%	29.46%	41.81%	443,105	15,380,530,820	1.22172	0.96634	0.96623	0.99151	1.08156	-0.85%
1991	27.70%	32.58%	39.72%	414,457	16,776,884,245	1.25995	1.01403	1.01340	1.02084	1.10410	2.06%
1992	27.09%	31.12%	41.79%	411,167	15,965,992,971	1.29437	0.97023	0.97005	0.99305	1.09642	-0.70%
1993	27.44%	31.43%	41.13%	395,639	16,382,401,649	1.32630	0.99637	0.99530	1.00769	1.10484	0.77%
1994	25.52%	35.25%	39.23%	367,196	18,347,418,469	1.35759	1.03052	1.03050	1.02772	1.13547	2.73%
1995	23.68%	36.63%	39.69%	346,843	18,969,381,288	1.38474	0.99639	0.99689	1.00579	1.14205	0.58%
1996	23.08%	34.63%	42.29%	338,040	18,296,870,339	1.41589	0.96850	0.96855	0.99029	1.13096	-0.98%
1997	23.69%	34.65%	41.65%	338,177	18,287,867,671	1.46683	0.99987	0.99987	1.01487	1.14778	1.48%

Chart D12: Input Price Index

Year	Shares			Prices			Price Indices				Growth
	Labor Compensation	Materials Payment	Property Income /w Depreciation	Labor	Materials	Capital	Laspeyres A	Paasche B	Fisher Relative $C=(A*B)^{0.5}$	Fisher Chain	
1984											
1985	31.25%	25.63%	43.12%	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	
1986	29.03%	24.48%	46.49%	1.02819	1.03135	1.08333	1.06395	1.06482	1.05335	1.05335	5.20%
1987	28.94%	23.85%	47.21%	1.05447	1.05353	1.07119	1.00008	0.99954	1.00720	1.06094	0.72%
1988	28.37%	26.87%	44.76%	1.08234	1.08639	1.00543	0.96969	0.97133	0.98622	1.04632	-1.39%
1989	27.91%	29.43%	42.66%	1.08797	1.12623	0.92674	0.96486	0.96543	0.97626	1.02148	-2.40%
1990	28.74%	29.46%	41.81%	1.17754	1.17202	0.89319	0.99518	0.99415	1.01874	1.04063	1.86%
1991	27.70%	32.58%	39.72%	1.23025	1.20494	0.83416	0.97284	0.97412	0.99311	1.03346	-0.69%
1992	27.09%	31.12%	41.79%	1.23828	1.23480	0.87247	1.03640	1.03680	1.02827	1.06267	2.79%
1993	27.44%	31.43%	41.13%	1.34653	1.25535	0.86554	1.00255	1.00256	1.02502	1.08926	2.47%
1994	25.52%	35.25%	39.23%	1.38602	1.29144	0.82836	0.98810	0.98970	0.99947	1.08868	-0.05%
1995	23.68%	36.63%	39.69%	1.38602	1.32167	0.83675	1.01642	1.01646	1.01237	1.10215	1.23%
1996	23.08%	34.63%	42.29%	1.45673	1.36140	0.91621	1.06381	1.06475	1.06116	1.16956	5.94%
1997	23.69%	34.65%	41.65%	1.53104	1.39550	0.89209	0.99681	0.99635	1.00905	1.18015	0.90%

APPENDIX B

ORIGINAL FCC MODEL

1985-1995

Chart D1: Components of FCC LEC Price Cap X-Factor [Excluding CPD]

Year	Input Price Growth Rates			Total Factor Productivity Growth Rates			LEC
	Total	U.S. Nonfarm	Differential	Total	U.S. Nonfarm	Differential	Price/Productivity
	RBOCs A	Business Sector B	C=B-A	RBOCs D	Business Sector E	F=D-E	Differential G=C+F
1984							
1985							
1986	4.94%	2.81%	-2.13%	2.58%	0.92%	1.66%	-0.47%
1987	0.56%	2.53%	1.97%	2.97%	-0.02%	2.99%	4.96%
1988	-1.58%	3.73%	5.31%	0.12%	0.46%	-0.34%	4.97%
1989	-2.36%	3.04%	5.40%	1.94%	-0.55%	2.49%	7.89%
1990	1.88%	3.31%	1.43%	6.85%	-0.47%	7.32%	8.76%
1991	-0.85%	2.06%	2.91%	2.03%	-0.89%	2.92%	5.83%
1992	2.68%	2.88%	0.20%	4.32%	1.10%	3.22%	3.42%
1993	2.27%	3.72%	1.45%	3.80%	0.55%	3.25%	4.70%
1994	-0.19%	3.50%	3.69%	2.21%	0.50%	1.71%	5.40%
1995	1.32%	3.09%	1.77%	5.20%	0.16%	5.04%	6.81%
Averages							
[1986-94]	0.82%	3.06%	2.25%	2.98%	0.18%	2.80%	5.05%
[1986-95]	0.87%	3.07%	2.20%	3.20%	0.18%	3.03%	5.23%
[1987-95]	0.41%	3.10%	2.68%	3.27%	0.09%	3.18%	5.86%
[1988-95]	0.39%	3.17%	2.77%	3.31%	0.11%	3.20%	5.97%
[1989-95]	0.68%	3.09%	2.41%	3.77%	0.06%	3.71%	6.12%
[1990-95]	1.18%	3.09%	1.91%	4.07%	0.16%	3.91%	5.82%
[1991-95]	1.04%	3.05%	2.01%	3.51%	0.28%	3.23%	5.23%

Chart D2: RBOC Interstate Revenues

Year	End User A	Interstate Switched Access B	Special Access C	Total Interstate D = A + B + C
1984				
1985	\$1,499,413,893	\$10,906,203,190	\$1,960,688,644	\$14,366,305,727
1986	\$2,400,475,814	\$10,484,265,170	\$2,574,800,716	\$15,459,541,700
1987	\$3,090,639,929	\$9,611,996,187	\$2,657,677,439	\$15,360,313,555
1988	\$3,604,221,000	\$9,662,529,000	\$2,539,698,000	\$15,806,448,000
1989	\$4,398,692,000	\$9,092,575,000	\$2,253,922,000	\$15,745,189,000
1990	\$4,679,142,000	\$8,595,750,000	\$2,209,064,000	\$15,483,956,000
1991	\$4,828,177,000	\$8,514,130,000	\$2,119,037,000	\$15,461,344,000
1992	\$4,963,262,000	\$8,650,880,000	\$2,153,565,000	\$15,767,707,000
1993	\$5,244,094,000	\$8,999,065,000	\$2,097,997,000	\$16,341,156,000
1994	\$5,589,662,000	\$9,293,783,000	\$2,217,125,000	\$17,100,570,000
1995	\$5,770,285,000	\$9,332,869,000	\$2,529,667,000	\$17,632,821,000

Chart D3: RBOC REVENUES (Excluding Miscellaneous Services)

Year	Local Service	Intrastate Toll and Intrastate Access	Interstate	Total
	A	B	C	D = A + B + C
1984				
1985	\$26,960,554,164	\$13,047,095,682	\$14,366,305,727	\$54,373,955,573
1986	\$28,626,174,049	\$13,538,946,795	\$15,459,541,700	\$57,624,662,544
1987	\$29,150,842,991	\$14,166,723,124	\$15,360,313,555	\$58,677,879,670
1988	\$29,226,988,000	\$14,994,975,000	\$15,806,448,000	\$60,028,411,000
1989	\$29,973,157,000	\$14,868,219,000	\$15,745,189,000	\$60,586,565,000
1990	\$30,699,085,000	\$15,014,729,000	\$15,483,956,000	\$61,197,770,000
1991	\$32,059,008,000	\$14,522,276,000	\$15,461,344,000	\$62,042,628,000
1992	\$33,359,990,000	\$14,225,181,000	\$15,767,707,000	\$63,352,878,000
1993	\$34,598,957,000	\$14,496,831,000	\$16,341,156,000	\$65,436,944,000
1994	\$35,758,637,000	\$14,355,983,000	\$17,100,570,000	\$67,215,190,000
1995	\$37,684,860,000	\$13,123,225,000	\$17,632,821,000	\$68,440,906,000

Chart D4: Calculation of Fisher Ideal Index for Interstate Output

Year	Revenue Shares			Quantities			Output Indices			Interstate Output Quantity Index	Growth
	End User	Interstate Switched Access	Special Access	Access Lines	Switched Access Minutes	Special Access Lines	Laspeyres A	Paasche B	Fisher Relative $C=(A*B)^{0.5}$		
1984											
1985	10.44%	75.92%	13.65%	92,671,959	156,853,820,000	1,230,590	1.000000	1.000000	1.000000	1.000000	
1986	15.53%	67.82%	16.66%	95,333,884	157,302,701,000	1,664,101	1.053249	1.052253	1.052751	1.052751	5.14%
1987	20.12%	62.58%	17.30%	98,228,585	173,154,171,000	1,764,445	1.083098	1.078813	1.080953	1.137975	7.78%
1988	22.80%	61.13%	16.07%	98,270,787	187,663,836,000	2,701,817	1.144443	1.114960	1.129605	1.285462	12.19%
1989	27.94%	57.75%	14.31%	101,190,050	210,406,134,000	2,448,090	1.065766	1.058920	1.062338	1.365595	6.05%
1990	30.22%	55.51%	14.27%	103,857,988	231,960,296,000	3,518,005	1.129086	1.114500	1.121769	1.531882	11.49%
1991	31.23%	55.07%	13.71%	107,383,807	246,710,182,000	5,151,699	1.111811	1.094856	1.103301	1.690127	9.83%
1992	31.48%	54.86%	13.66%	108,938,065	262,187,655,000	6,033,139	1.062516	1.060258	1.061386	1.793878	5.96%
1993	32.09%	55.07%	12.84%	112,196,681	278,173,161,000	10,153,615	1.136148	1.102619	1.119258	2.007812	11.27%
1994	32.69%	54.35%	12.97%	115,264,861	298,342,017,323	13,824,365	1.095119	1.086800	1.090952	2.190425	8.71%
1995	32.72%	52.93%	14.35%	119,887,506	334,981,582,000	16,107,677	1.101268	1.099925	1.100596	2.410774	9.59%
Average[1986-95]											8.80%

Chart D5: Calculation of Fisher Ideal Index for Total Company Output

Year	Revenue Shares			Quantities			Output Indices			Total Company Output Index	Growth
	Local Service	Intrastate Toll and Intrastate Access	Interstate	Number of Local Calls	Intrastate DEMs	Interstate Quantity Index	Laspeyres	Paasche	Fisher Relative $C=(A*B)^{0.5}$		
	A	B	C				A	B			
1984											
1985	49.58%	24.00%	26.42%	310,696,999,600	164,191,177,000	1.000000	1.000000	1.000000	1.000000	1.000000	
1986	49.68%	23.50%	26.83%	315,839,746,231	173,173,536,000	1.052751	1.035272	1.034895	1.035083	1.035083	3.45%
1987	49.68%	24.14%	26.18%	320,735,770,416	183,597,411,000	1.137975	1.043561	1.042639	1.043100	1.079696	4.22%
1988	48.69%	24.98%	26.33%	318,724,184,964	191,904,837,000	1.285462	1.041736	1.039449	1.040592	1.123522	3.98%
1989	49.47%	24.54%	25.99%	330,212,044,704	207,298,177,000	1.365595	1.054001	1.053389	1.053695	1.183850	5.23%
1990	50.16%	24.53%	25.30%	342,403,840,684	217,913,904,000	1.531882	1.062478	1.060759	1.061618	1.256797	5.98%
1991	51.67%	23.41%	24.92%	353,219,571,000	219,713,721,000	1.690127	1.044009	1.042832	1.043420	1.311367	4.25%
1992	52.66%	22.45%	24.89%	365,468,629,000	224,278,538,000	1.793878	1.038080	1.038005	1.038042	1.361254	3.73%
1993	52.87%	22.15%	24.97%	376,995,406,000	227,540,869,000	2.007812	1.049556	1.048164	1.048860	1.427765	4.77%
1994	53.20%	21.36%	25.44%	392,601,075,000	235,362,364,000	2.190425	1.052215	1.052028	1.052121	1.502182	5.08%
1995	55.06%	19.17%	25.76%	409,383,799,000	246,926,539,000	2.410774	1.058829	1.058314	1.058572	1.590167	5.69%
Average[1986-95]											4.64%

Chart D6: Labor Input Price and Growth

Year	Total Employees A	Total Compensation B	Labor Rate Annual C = B / A	Labor Price Index (Base = 1985)	Labor Growth %Chg in A
1984					
1985	504,113	16,991,572,326	33705.88	1.000000	
1986	482,698	16,728,435,454	34656.11	1.028192	-4.34%
1987	477,714	16,978,905,847	35541.99	1.054474	-1.04%
1988	466,827	17,030,359,791	36481.09	1.082336	-2.31%
1989	461,149	16,910,850,694	36671.12	1.087974	-1.22%
1990	443,105	17,586,868,921	39690.07	1.177541	-3.99%
1991	414,457	17,186,211,200	41466.81	1.230255	-6.68%
1992	411,167	17,160,988,000	41737.27	1.238279	-0.80%
1993	395,639	17,956,438,000	45385.91	1.346528	-3.85%
1994	367,196	17,154,284,000	46716.97	1.386018	-7.46%
1995	346,843	16,203,522,000	46717.17	1.386024	-5.70%
				Average[1986-95]	-3.74%

Chart D7: Summary of Capital Adjustments and Average Depreciation

Year	TPIS.BOY A	Unadj. Additions B	TPIS.EOY C	Retires D=A+B-C	Adjustment Factor E	Adjusted Additions F = B * E	Adjusted EOY TPIS G = A+F-D	Depreciation Accruals H	Adjusted Depreciation Rate I=H/((A+G)/2)
1984									
1985	138,879,365	15,001,998	149,061,793	4,819,569	0.8880	13,321,774	147,381,569	10,241,376	7.155%
1986	149,061,793	14,842,725	159,010,189	4,894,328	0.8880	13,180,340	157,347,804	11,826,961	7.720%
1987	159,010,189	14,138,370	167,720,577	5,427,983	0.8880	12,554,872	166,137,079	13,311,655	8.188%
1988	168,505,114	14,284,742	175,860,216	6,929,640	1.0000	14,284,742	175,860,216	13,134,992	7.629%
1989	175,860,216	13,283,569	182,978,381	6,165,404	1.0000	13,283,569	182,978,381	13,420,810	7.480%
1990	182,978,381	14,476,334	187,168,695	10,286,020	1.0000	14,476,334	187,168,695	13,439,933	7.262%
1991	187,168,695	14,527,049	192,034,545	9,661,199	1.0000	14,527,049	192,034,545	13,200,593	6.962%
1992	192,034,545	14,611,866	196,411,915	10,234,496	1.0000	14,611,866	196,411,915	13,337,581	6.867%
1993	196,411,915	14,860,116	203,082,418	8,189,613	1.0000	14,860,116	203,082,418	14,032,782	7.025%
1994	203,082,418	14,717,999	209,325,562	8,474,855	1.0000	14,717,999	209,325,562	14,863,196	7.208%
1995	209,325,562	15,374,568	217,430,207	7,269,923	1.0000	15,374,568	217,430,207	15,358,553	7.198%
Average[1985-95]									7.336%

Chart D8: Construction of Materials Quantity Index

Year	Materials Price Index (1985=1.00) A	Operating Expense B	Depreciation & Amortization Expense C	Employee Compensation D	Materials Expense E = B - C - D	Materials Quantity Index F = E / A	Materials Quantity Index (1985 = 1.0) G	Materials Quantity Index Growth H
1984								
1985	1.000000	40,953,072,435	10,024,710,656	16,991,572,326	13,936,789,453	13,936,789,453	1.000000	
1986	1.020800	42,424,084,849	11,592,001,248	16,728,435,454	14,103,648,147	13,816,269,736	0.991352	-0.87%
1987	1.035400	44,293,127,430	13,316,999,560	16,978,905,847	13,997,222,023	13,518,661,409	0.969998	-2.18%
1988	1.059000	46,809,139,000	13,646,937,000	17,030,359,791	16,131,842,209	15,233,089,905	1.093013	11.94%
1989	1.098500	48,600,813,000	13,860,101,000	16,910,850,694	17,829,861,306	16,231,098,139	1.164622	6.35%
1990	1.143400	49,544,744,000	13,931,515,000	17,586,868,921	18,026,360,079	15,765,576,420	1.131220	-2.91%
1991	1.169300	50,901,049,000	13,499,778,000	17,186,211,200	20,215,059,800	17,288,172,240	1.240470	9.22%
1992	1.193800	50,698,625,000	13,822,882,000	17,160,988,000	19,714,755,000	16,514,286,313	1.184942	-4.58%
1993	1.205700	52,766,635,000	14,244,514,000	17,956,438,000	20,565,683,000	17,057,048,188	1.223886	3.23%
1994	1.234200	55,916,863,000	15,068,058,000	17,154,284,000	23,694,521,000	19,198,283,098	1.377526	11.83%
1995	1.263900	56,831,094,000	15,556,284,000	16,203,522,000	25,071,288,000	19,836,449,086	1.423316	3.27%

Chart D8a: Adjustments of 1985-87 RBOC Operating Expenses for Accounting Changes

	USTA Study Operating Expense A	Nonregulated Expense Adjustmts B	Capital/Expense Shift C	Shift Factor D = (A+B+C)/A	RBOC Operating Expense E	Adjusted Operating Exp. F = D * E
1985	46,223,368,251	406,886,403	1,985,079,714	1.05175	38,938,104,053	40,953,072,435
1986	48,113,849,487	471,112,072	1,959,363,711	1.05052	40,384,079,165	42,424,084,849
1987	49,562,282,080	1,089,570,002	1,908,791,665	1.06050	41,766,392,483	44,293,127,430

Chart D9: Capital Quantity and Price Index Calculations

Year	Benchmark A	Adjusted Capital Additions B	BEA Composite Asset Price C	Capital Stock Quantity D	Capital Input Quantity E	Capital Input Quantity Growth F	Property Income /w Depreciation G	Capital Rental Price** H	Capital Rental Price Index I	Rental Price Index Growth J
1984		n/a		103,903,095						
1985	109,602,959	13,321,774	1.000000	109,602,710	1.000000		23,445,593,794	0.225648657	1.000000	
1986		13,180,340	1.013181	114,571,307	1.054855	0.053403	26,792,578,943	0.244451792	1.083329	8.00%
1987		12,554,872	1.030871	118,345,444	1.102675	0.044335	27,701,751,800	0.24178612	1.071516	-1.10%
1988		14,284,742	1.035999	123,452,193	1.138998	0.032410	26,866,209,000	0.227015153	1.006056	-6.30%
1989		13,283,569	1.075241	126,749,984	1.188147	0.042246	25,845,853,000	0.209359205	0.927811	-8.10%
1990		14,476,334	1.092233	130,705,704	1.219887	0.026363	25,584,541,000	0.201850448	0.894534	-3.65%
1991		14,527,049	1.106013	134,251,960	1.257958	0.030732	24,641,357,000	0.188525491	0.835482	-6.83%
1992		14,611,866	1.111942	137,544,312	1.292088	0.026770	26,477,135,000	0.197219728	0.874012	4.51%
1993		14,860,116	1.123482	140,681,129	1.323775	0.024228	26,914,823,000	0.195681106	0.867194	-0.78%
1994		14,717,999	1.140461	143,266,301	1.353965	0.022550	26,366,385,000	0.187419487	0.830581	-4.31%
1995		15,374,568	1.150848	146,115,862	1.378845	0.018209	27,166,096,000	0.189619581	0.840331	1.17%

Column C from Capital Price Index Workbook

Chart D10: Factor Shares of Total Payments

Year	Labor Compensation	Materials Payment	Property Income /w Depreciation	Total Factor Payment	Labor Compensation Share	Materials Payment Share	Property Income /w Depreciation Share
1984							
1985	16,991,572,326	13,936,789,453	23,445,593,794	54,373,955,573	31.25%	25.63%	43.12%
1986	16,728,435,454	14,103,648,147	26,792,578,943	57,624,662,544	29.03%	24.48%	46.49%
1987	16,978,905,847	13,997,222,023	27,701,751,800	58,677,879,670	28.94%	23.85%	47.21%
1988	17,030,359,791	16,131,842,209	26,866,209,000	60,028,411,000	28.37%	26.87%	44.76%
1989	16,910,850,694	17,829,861,306	25,845,853,000	60,586,565,000	27.91%	29.43%	42.66%
1990	17,586,868,921	18,026,360,079	25,584,541,000	61,197,770,000	28.74%	29.46%	41.81%
1991	17,186,211,200	20,215,059,800	24,641,357,000	62,042,628,000	27.70%	32.58%	39.72%
1992	17,160,988,000	19,714,755,000	26,477,135,000	63,352,878,000	27.09%	31.12%	41.79%
1993	17,956,438,000	20,565,683,000	26,914,823,000	65,436,944,000	27.44%	31.43%	41.13%
1994	17,154,284,000	23,694,521,000	26,366,385,000	67,215,190,000	25.52%	35.25%	39.23%
1995	16,203,522,000	25,071,288,000	27,166,096,000	68,440,906,000	23.68%	36.63%	39.69%

Chart D11: Input Quantity Index

	Shares			Quantities			Quantity Indexes				Growth
	Labor Compensation	Materials Payment	Property Income /w Depreciation	Labor	Materials	Capital	Laspeyers A	Paasche B	Fisher Relative C=(A*B)^0.5	Fisher Chain	
Year											
1984											
1985	31.25%	25.63%	43.12%	504,113	13,936,789,453	1.00000	1.00000	1.00000	1.00000	1.00000	
1986	29.03%	24.48%	46.49%	482,698	13,816,269,736	1.05486	0.97277	0.97270	1.00871	1.00871	0.87%
1987	28.94%	23.85%	47.21%	477,714	13,518,661,409	1.10267	0.98454	0.98458	1.01258	1.02140	1.25%
1988	28.37%	26.87%	44.76%	466,827	15,233,089,905	1.13900	1.04481	1.04468	1.03930	1.06154	3.85%
1989	27.91%	29.43%	42.66%	461,149	16,231,098,139	1.18815	1.02562	1.02623	1.03343	1.09702	3.29%
1990	28.74%	29.46%	41.81%	443,105	15,765,576,420	1.21989	0.96623	0.96613	0.99130	1.08748	-0.87%
1991	27.70%	32.58%	39.72%	414,457	17,288,172,240	1.25796	1.01696	1.01609	1.02248	1.11192	2.22%
1992	27.09%	31.12%	41.79%	411,167	16,514,286,313	1.29209	0.97216	0.97203	0.99416	1.10543	-0.59%
1993	27.44%	31.43%	41.13%	395,639	17,057,048,188	1.32377	1.00000	0.99869	1.00970	1.11615	0.97%
1994	25.52%	35.25%	39.23%	367,196	19,198,283,098	1.35396	1.03351	1.03324	1.02911	1.14865	2.87%
1995	23.68%	36.63%	39.69%	346,843	19,836,449,086	1.37885	0.99600	0.99652	1.00493	1.15431	0.49%

Chart D12: Input Price Index

Year	Shares			Quantities			Quantity Indexes				Growth
	Labor	Materials	Property	Labor	Materials	Capital	Laspeyers	Paasche	Fisher	Fisher	
	Compensation	Payment	Income /w Depreciation				A	B	Relative C=(A*B)^0.5	Chain	
1984											
1985	31.25%	25.63%	43.12%	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	
1986	29.03%	24.48%	46.49%	1.02819	1.02080	1.08333	1.06002	1.06092	1.05064	1.05064	4.94%
1987	28.94%	23.85%	47.21%	1.05447	1.03540	1.07152	0.99779	0.99742	1.00563	1.05655	0.56%
1988	28.37%	26.87%	44.76%	1.08234	1.05900	1.00606	0.96707	0.96872	0.98433	1.03999	-1.58%
1989	27.91%	29.43%	42.66%	1.08797	1.09850	0.92781	0.96540	0.96597	0.97665	1.01571	-2.36%
1990	28.74%	29.46%	41.81%	1.17754	1.14340	0.89453	0.99546	0.99444	1.01895	1.03496	1.88%
1991	27.70%	32.58%	39.72%	1.23025	1.16930	0.83548	0.97064	0.97196	0.99152	1.02618	-0.85%
1992	27.09%	31.12%	41.79%	1.23828	1.19380	0.87401	1.03478	1.03523	1.02712	1.05401	2.68%
1993	27.44%	31.43%	41.13%	1.34653	1.20570	0.86719	0.99978	0.99982	1.02297	1.07822	2.27%
1994	25.52%	35.25%	39.23%	1.38602	1.23420	0.83058	0.98631	0.98786	0.99812	1.07619	-0.19%
1995	23.68%	36.63%	39.69%	1.38602	1.26390	0.84033	1.01757	1.01762	1.01324	1.09044	1.32%

APPENDIX C

MODIFIED FCC MODEL

(BLS NONFARM TFP AND INPUT PRICE SERIES)

1985-1995

Chart D1: Components of FCC LEC Price Cap X-Factor [Excluding CPD]

Year	Input Price Growth Rates			Total Factor Productivity Growth Rates			LEC Price/Productivity Differential G=C+F
	Total RBOCs	U.S. Nonfarm Business Sector	Differential	Total RBOCs	U.S. Nonfarm Business Sector	Differential	
	A	B	C=B-A	D	E	F=D-E	
1984							
1985							
1986	4.94%	2.33%	-2.61%	2.58%	1.10%	1.48%	-1.13%
1987	0.56%	3.45%	2.89%	2.97%	-0.50%	3.47%	6.36%
1988	-1.58%	5.02%	6.60%	0.12%	0.30%	-0.18%	6.42%
1989	-2.36%	2.42%	4.78%	1.94%	0.20%	1.74%	6.52%
1990	1.88%	3.31%	1.43%	6.85%	-0.70%	7.55%	8.99%
1991	-0.85%	1.77%	2.62%	2.03%	-1.41%	3.44%	6.06%
1992	2.68%	3.15%	0.47%	4.32%	1.71%	2.61%	3.08%
1993	2.27%	2.18%	-0.09%	3.80%	0.20%	3.60%	3.51%
1994	-0.19%	3.37%	3.56%	2.21%	0.30%	1.91%	5.47%
1995	1.32%	2.61%	1.30%	5.20%	-0.20%	5.40%	6.70%
Averages							
[1986-94]	0.82%	3.00%	2.18%	2.98%	0.13%	2.85%	5.03%
[1986-95]	0.87%	2.96%	2.09%	3.20%	0.10%	3.10%	5.20%
[1987-95]	0.41%	3.03%	2.62%	3.27%	-0.01%	3.28%	5.90%
[1988-95]	0.39%	2.98%	2.58%	3.31%	0.05%	3.26%	5.84%
[1989-95]	0.68%	2.69%	2.01%	3.77%	0.01%	3.75%	5.76%
[1990-95]	1.18%	2.73%	1.55%	4.07%	-0.02%	4.09%	5.63%
[1991-95]	1.04%	2.62%	1.57%	3.51%	0.12%	3.39%	4.96%

APPENDIX D

MODIFIED FCC MODEL (REVISED MATERIALS PRICE INDEX) 1985-1995

Chart D1: Components of FCC LEC Price Cap X-Factor [Excluding CPD]

Year	Input Price Growth Rates			Total Factor Productivity Growth Rates			LEC
	Total RBOCs	U.S. Nonfarm Business Sector	Differential	Total RBOCs	U.S. Nonfarm Business Sector	Differential	Price/Productivity Differential
	A	B	C=B-A	D	E	F=D-E	G=C+F
1984							
1985							
1986	5.20%	2.81%	-2.39%	2.84%	0.92%	1.92%	-0.47%
1987	0.73%	2.53%	1.80%	3.14%	-0.02%	3.16%	4.96%
1988	-1.37%	3.73%	5.10%	0.33%	0.46%	-0.13%	4.97%
1989	-2.38%	3.04%	5.42%	1.93%	-0.55%	2.48%	7.89%
1990	1.87%	3.31%	1.44%	6.85%	-0.47%	7.32%	8.76%
1991	-0.69%	2.06%	2.75%	2.19%	-0.89%	3.08%	5.83%
1992	2.80%	2.88%	0.08%	4.44%	1.10%	3.34%	3.42%
1993	2.48%	3.72%	1.24%	4.01%	0.55%	3.46%	4.70%
1994	-0.02%	3.50%	3.52%	2.38%	0.50%	1.88%	5.40%
1995	1.29%	3.09%	1.80%	5.18%	0.16%	5.02%	6.81%
Averages							
[1986-94]	0.96%	3.06%	2.11%	3.12%	0.18%	2.94%	5.05%
[1986-95]	0.99%	3.07%	2.08%	3.33%	0.18%	3.15%	5.23%
[1987-95]	0.52%	3.10%	2.57%	3.38%	0.09%	3.29%	5.86%
[1988-95]	0.50%	3.17%	2.67%	3.41%	0.11%	3.30%	5.97%
[1989-95]	0.76%	3.09%	2.32%	3.85%	0.06%	3.80%	6.12%
[1990-95]	1.29%	3.09%	1.81%	4.17%	0.16%	4.02%	5.82%
[1991-95]	1.17%	3.05%	1.88%	3.64%	0.28%	3.36%	5.23%

APPENDIX E

ORIGINAL FCC MODEL (REVISED BEA COMPOSITE ASSET PRICE) 1985-1995

(Revised November 4, 1998)

Chart D1: Components of FCC LEC Price Cap X-Factor [Excluding CPD]

Year	Input Price Growth Rates			Total Factor Productivity Growth Rates			LEC
	Total RBOCs	U.S. Nonfarm Business Sector	Differential	Total RBOCs	U.S. Nonfarm Business Sector	Differential	Price/Productivity Differential
	A	B	C=B-A	D	E	F=D-E	G=C+F
1984							
1985							
1986	4.94%	2.81%	-2.13%	2.58%	0.92%	1.66%	-0.47%
1987	0.55%	2.53%	1.98%	2.96%	-0.02%	2.98%	4.96%
1988	-1.59%	3.73%	5.32%	0.11%	0.46%	-0.35%	4.97%
1989	-2.39%	3.04%	5.43%	1.92%	-0.55%	2.47%	7.89%
1990	1.86%	3.31%	1.45%	6.84%	-0.47%	7.31%	8.76%
1991	-0.86%	2.06%	2.92%	2.02%	-0.89%	2.91%	5.83%
1992	2.67%	2.88%	0.21%	4.31%	1.10%	3.21%	3.42%
1993	2.27%	3.72%	1.45%	3.80%	0.55%	3.25%	4.70%
1994	-0.22%	3.50%	3.72%	2.18%	0.50%	1.68%	5.40%
1995	1.25%	3.09%	1.84%	5.14%	0.16%	4.98%	6.81%
Averages							
[1986-94]	0.80%	3.06%	2.26%	2.97%	0.18%	2.79%	5.05%
[1986-95]	0.85%	3.07%	2.22%	3.19%	0.18%	3.01%	5.23%
[1987-95]	0.39%	3.10%	2.70%	3.25%	0.09%	3.16%	5.86%
[1988-95]	0.37%	3.17%	2.79%	3.29%	0.11%	3.18%	5.97%
[1989-95]	0.66%	3.09%	2.43%	3.74%	0.06%	3.69%	6.12%
[1990-95]	1.16%	3.09%	1.93%	4.05%	0.16%	3.89%	5.82%
[1991-95]	1.02%	3.05%	2.03%	3.49%	0.28%	3.21%	5.23%

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